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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,412	02/25/2002	Koji Takikura	SN-US010023	8254

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EXAMINER

LANGDON, EVAN H

ART UNIT PAPER NUMBER

3654

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/080,412

Applicant(s)

TAKIKURA, KOJI

Examiner

Evan H Langdon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 November 2003 has been entered.

#### *Claim Rejections - 35 USC § 112 1<sup>st</sup> Paragraph*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 and 12-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. [It is not clear what the connection is between the centrifugal force as cited on page 4 of the specification, lines 24-28, and the manner in which to apply the film that prevents water from intruding. As cited in the disclosure, the centrifugal force is used to assist the repelled water to the drainage hole for discharging the repelled water. Further, as disclosed, the drainage hole doesn't even require water-repellency treatment and may be subject to a hydrophilic treatment, which teaches away from the idea of water-repellency.]

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Koike (6,164,577).

Sato shows a water sealing component assembly 15, 34, 35 and outer cover plate as seen in Figure 6, comprising first component (cover plate) and a second component 15 arranged adjacent the first component such that a clearance is defined between clearance defining surfaces of the first and second components, and the first component is rotatable relative to the second.

Although Sato shows a water-sealing component assembly, he fails to show a water-repelling film layer provided on at least one of the clearance defining surfaces of the first and second components.

Koike teaches a surface treatment water-repelling film layer generally referred to as 14 for corrosion and weather resistance as explained in column 5 on lines 55-65. This film layer is inherently water-repellent if it is to be corrosion and weather resistant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the water sealing component assembly of Sato to include a water-repelling film layer as suggested by Koike, to repel water from the defined clearance between the first and second component.

In regards to claim 2, Sato as modified by Koike teaches ground film layer 16 provided between the final water-repelling film layer 22 and either the first or second component.

In regards to claim 3, where the water repelling film layer is a thin metallic film impregnated with a fluorinated resin as explained in column 5 on lines 30-40 (Koike).

In regards to claims 4 and 5, it would have been obvious to one of ordinary skill in the art when combining Sato with the teachings of Koike to apply the water-repelling film layer on at least one of mutually opposing surfaces of the first and second components and/or a contiguous surface thereof, to make the coated component water-repellant.

In regards to claim 6, Sato as modified by Koike teaches a water-sealing component comprising a bearing 35 (Sato) having an inner and an outer race, the first component being a pressing member (cover plate) attached to the outer race the second member being a rod member 15 and attached to the inner race as seen in Figure 6 (Sato).

In regards to claim 7, Sato as modified by Koike teaches a water-sealing component comprising a bearing 35 (Sato) having an inner and an outer race, the first component being a pressing member (cover plate) attached to the outer race the second component having a cylindrical member 34 fitted to the rod member.

In regards to claim 8, Sato as modified by Koike teaches a water-sealing component comprising a bearing 35 (Sato) having an inner and an outer race, the first component being a plate-shaped member (cover plate) attached to the outer race and the second component having a pressing member 34 attached to the inner race of the bearing.

In regards to claim 9, it would have been obvious to one of ordinary skill in the art when combining Sato with the teachings of Koike to apply the water-repelling film layer on both of the mutually opposing surfaces of the first and second components to them more water-repellant.

In regards to claim 10, where the cylindrical member 34 has a projecting portion which has a lip that tapers out as seen in Figure 8 (Sato).

In regards to claim 12-14, Sato as modified by Koike as applied to claims 1-10 teaches a water-sealing component in a fishing reel attached to a fishing rod.

In regards to claim 15, Sato as modified by Koike teaches a fishing reel comprising a handle 1b (Sato) a reel unit having a spool shaft 15, a rotor 3 rotatable about the spool shaft 15, a spool 4 disposed adjacent the rotor 3 and axially movable along the spool shaft, a water-sealing structure defined between the rotor and spool shaft, a first component (cover plate) attached to the rotor as seen in Figure 6 (Sato), a second component being a spool shaft arranged adjacent to the first component such that a clearance is defined between the opposing surfaces of the first and second components, where the first component (cover plate) is rotatable relative to the second component (shaft 15), and a water repelling film layer 14 (Koike) on at least on of the opposing surfaces of the first and second components.

In regards to claim 16, Sato as modified by Koike teaches the spinning reel water-sealing structure comprising a bearing 35 (Sato) having an inner attached to the spool shaft and an outer race attached to the rotor, the first component being a pressing member (cover plate) attached to the outer race and the second component being the spool shaft 15.

In regards to claim 17, Sato as modified by Koike teaches the spinning reel water-sealing structure comprising a bearing 35 (Sato) having an inner attached to the spool shaft and an outer

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race attached to the rotor, the first component being a pressing member (cover plate) attached to the outer race and the second component having a cylindrical member 34 fitted to the spool shaft.

In regards to claim 18, Sato as modified by Koike teaches the spinning reel water-sealing structure comprising a bearing 35 (Sato) having an inner and an outer race, the first component being a plate-shaped member (cover plate) attached to the outer race and the second component having a pressing member 34 attached to the inner race of the bearing.

In regards to claim 19 and 20, refer to Sato as modified by Koike as applied to claims 9 and 10 above.

***Allowable Subject Matter***

Claims 11 and 21 are allowed.

***Response to Amendment***

Applicant's arguments filed on 18 November 2003 have been fully considered but are not persuasive with respect to claims 1-10 and 12-20. The declaration of Koji Takikura has been considered but does not present a clear nexus between the long-felt need and the claimed subject matter.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H Langdon whose telephone number is (703)-306-5768.

The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703)-308-2688. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

ehl

  
KATHY MATECKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600